

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Currently Amended) A pulse tube refrigerator (PTR) arrangement comprising a pulse tube and a regenerator tube within a cryogenic apparatus, wherein:

[[a]] the regenerator tube of the PTR is finned; and [[.]]

a plurality of fins associated with the regenerator tube are arranged along the regenerator tube to transfer heat from an atmosphere surrounding said tubes to the regenerator tube.

Claim 2. (Currently Amended) A PTR arrangement according to claim 1, wherein the a first regenerator tube is finned across part of [[the]] its length of the tube.

Claim 3. (Currently Amended) A PTR arrangement according to claim [[1,]] 4, wherein:

the PTR arrangement comprises two stages, each state having a pulse tube and a regenerator tube; and

the second stage regenerator tube is finned.

Claim 4. (Original) A PTR arrangement according to claim 1, wherein the PTR arrangement is a multi-stage PTR arrangement.

Claim 5. (Original) A PTR arrangement according to claim 1, wherein the regenerator tube is fabricated from a thin walled alloy which has a moderate thermal conductivity at low temperatures.

Claim 6. (Original) A PTR arrangement according to claim 1, wherein the fins comprise annular fins.

Claim 7. (Original) A PTR arrangement according to claim 6, wherein the annular fins are spaced apart regularly, along an outside of the regenerator tube.

Claim 8. (Original) A PTR arrangement according to claim 6, wherein the annular fins are not of a uniform size.

Claim 9. (Original) A PTR arrangement according to claim 1, wherein the fins comprise one or more spirally arranged strip sheets.

Claim 10. (Original) A PTR arrangement according to claim 1, wherein the fins comprise outwardly extending prongs.

Claim 11. (Original) A PTR arrangement according to claim 1, wherein the fins comprise rectangular sheets attached about the circumference of the regenerator tube, the sheets being attached along one edge to the regenerator tube.

Claim 12. (Currently Amended) A PTR arrangement according to claim 1, wherein the regenerator tube is corrugated, ~~whereby to define fins which comprise part of the wall of the tube, which is corrugated~~ either axially with respect to an axis of the tube or

perpendicularly with respect to said axis, corrugations of said regenerator tube forming fins which comprise part of a wall of the regenerator tube.

Claim 13. (Original) A PTR arrangement according to claim 1, wherein the fins comprise one or more types of fin.

Claim 14. (Currently Amended) A PTR arrangement according to claim 1, wherein ~~one or more~~ the pulse tubes have tube has an insulated walls wall.

Claim 15. (Currently Amended) A ~~pulse tube refrigerator~~ PTR arrangement according to claim 1, wherein the PTR arrangement is associated with a magnetic resonance imaging apparatus.

Claim 16. (Currently Amended) A method of ~~using~~ operating a pulse tube refrigerator (PTR) arrangement comprising a pulse tube and a regenerator tube within a cryogenic apparatus, wherein the regenerator tube ~~of the PTR arrangement~~ is finned, the method comprising: ~~the step of~~

providing the PTR arrangement with a refrigerator sock containing a helium column that constitutes an atmosphere surrounds said tubes; and

transferring heat from ~~[[an]]~~ said atmosphere ~~surrounding the tubes of the PTR assembly~~ to the regenerator tube via fins associated with the regenerator tube.

Claim 17. (Currently Amended) A method according to claim 16 wherein the ~~recondensor~~ PTR arrangement is associated with a magnetic resonance imaging apparatus.